



**Editor's Note:** In this issue of UPDATE, OCCRL is proud to publish a series of articles that highlights innovation and change occurring in community colleges in Illinois and throughout the United States. Mr. Mark Mitsui leads the conversation with insights into his leadership role in the U.S. Department of Education to help craft and link federal policy to ensure systemic reform of institutional policy and practice in the community college context. We are grateful that Mr. Mitsui spent time with us to share his thoughts, and we know you will appreciate his point of view. We are also happy to share information from our Pathways to Results (PTR) project on learning outcomes paradigms, and lessons learned from outstanding presentations from our Scaling Up PTR Conference. We are also pleased to share developments of two Trade Adjustment Assistance Community College and Career Training (TAACCCT) consortia in Illinois, with one focused on energy and another on manufacturing. This issue also includes information about OCCRL's Transformative Change Initiative (TCI), which highlights the importance of scaling innovations associated with TAACCCT. We understand how valuable this information will be to you, our readers, and we are pleased to share it with you. We love hearing from you, and we welcome your comments on articles that appear in this issue. Please enjoy!



Debra D. Bragg

## The Importance of Linking Policy Intent to Policy Outcome: An Interview with Mark Mitsui

by Debra D. Bragg, Office of Community College Research and Leadership



Mark Mitsui

Mark Mitsui is the Deputy Assistant Secretary of Community Colleges in the United States Department of Education, and his interviewer, Debra Bragg, is the Gutgsell Endowed Professor and founding director of the Office of Community College Research and Leadership (OCCRL). They sat down for an interview on February 18, 2015, in Baltimore, Maryland.

**Bragg:** Over 4,000 professionals are affiliated with OCCRL's various projects and listservs, and these are primarily community college educators from across the country, with some international subscribers. We are delighted to help our readers to get to know you and to know more about you. It is exciting to know that someone like yourself is looking out for the interests of community college education in the U.S.

Tell us a little bit about yourself. What do you do in the U.S. Department of Education?

**Mitsui:** My name is Mark Mitsui, and I am from Seattle, Washington - born and raised, and so this is actually the first time that I've lived outside of Seattle. I've come all the way from one Washington to the other Washington.

**Bragg:** There's a little distance *and* difference between those two.

**Mitsui:** Yes, a little different is true. This job has made me really appreciate the experiences and good fortune I've had prior to coming to D.C. I started in the community and technical college system in Washington State as a faculty member. I was a career-technical education (CTE) instructor at Renton Technical College. In 1988, I became full-time faculty, and I'm very proud to have been named by my peers with the outstanding faculty award in 1994.

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In 1995, I wanted to find out more about the community and technical college system so I accepted a job in student services at North Seattle Community College, and then I became a director and eventually I moved from North Seattle to Green River Community College as an Assistant Dean. From there I went to South Seattle Community College as a Vice President, and that's where I helped the college to make the transition from being a non-minority serving institution (MSI) to a MSI. In 2010, I was named President of North Seattle. So, I came back home in a sense.

**Bragg:** As you've navigated your career pathway, what skills and knowledge have been valuable to help you get to your current position in Washington D.C.?

**Mitsui:** Throughout my career, the skills that I found to be helpful are embedded in all those experiences. At each stage I found that something from a previous stage helped me in the next stage. So, for example, coming from the community college world to the federal world, I found the issues to be very similar, just at a much larger scale. So, looking back, when we talked about developmental education at the campus level, you could literally see it as you went from very basic math to calculus. You could see students leave; you could see the decrease in diversity as you went from one class to the next. Federal policy initiatives can have a cumulative effect, and I am very committed to this work.

**Bragg:** How do you think about policy with respect to improving community colleges?

**Mitsui:** I constantly think about how to better integrate policy intent with policy outcome. I'm trying to think through the various stages of policy development, from federal, to state, to local to district, to individual campuses, and I try to think through how all that might play out on the ground. Having the professional experience in both the classroom and student services and in the community and technical college system, single and multi-campus, helps me to ground my thinking about projected policy outcomes.

**Bragg:** Do you see your background as a community college president helpful in this process?

**Mitsui:** Yes, but it's been a transition that I've had to be cognizant of in moving from college president to federal policy. As a practitioner in a policy world, I acknowledge that there are a lot of policy experts that have been thinking policy for as long as I've been practicing, and they have more policy knowledge in these areas. However, by trying to close the loop on policy impact, I think a practitioner's perspective is valuable to the policy world. I've been very happy with the level of openness I've seen and experienced from policy folks regarding a practitioner's perspective. There is always interest at the policy level in the practitioner's perspective and in talking to folks that are doing the work every day, and I am really pleased about that.

**Bragg:** In the context of some of the reforms in community colleges today, faculty are sometimes seen as an obstacle rather than an asset. Because of your background as a faculty member, I wonder if you will speak to the role of community and technical college faculty in bringing about change?

**Mitsui:** Yes. I do think the faculty perspective is essential in policy development, and certainly in policy and program implementation. If we can get faculty perspectives in the development stage, more progress can be made. I recently spoke at the National Association for Developmental Education annual conference and appreciated the opportunity to reconnect with faculty that are doing important work in developmental education every day. We recently published a review of some articles on developmental education in OCTAE Connections and will continue this theme into another edition and we are working on a couple of other projects.

**Bragg:** How do you think we could get more of this to happen?

**Mitsui:** Whenever I'm in a meeting where we're talking about policy, and the community colleges, for example, then I often put my faculty hat on. I try to think through how we might want to frame the issue in a way to really move the needle on the ground.

**Bragg:** These ideas are exciting. Please tell us about other new initiatives that President Obama's administration is proposing for community colleges.

**Mitsui:** We will develop more public-facing materials that have a faculty perspective to help inform how we are thinking about different grant programs and different types of initiatives. One thing I'm excited about in the 2016 budget is *America's College Promise*, partly because of the access component. In those states that have already invested quite a bit of state funding to reduce tuition, the difference between the average tuition price and what they're charging will be available to the state to use for other purposes, within the community colleges. And so, there is an opportunity for additional resources to be used by community college communities, by faculty and student services administration, to help more students to be successful.

Within adult education, we also have LINCS. It's for adult educators, for educators of adult students, and mostly English as a Second Language (ESL) and adult high school completion. It's an online community, and there are over 20 different discussion groups. Faculty can talk about pedagogy and curriculum and support needs for students, and they can pose questions and exchange information. It's a great model for creating a community of practice among faculty. That's one example that exists in the postsecondary space that would be an interesting model to take a look at and ask, 'How might we be able to leverage that?'

**Bragg:** OCCRL is part of the new *Career Pathway Exchange*, and a lot of valuable resources are being made available through the Exchange. It brings together resources on career pathways and then pushes them out. This initiative is supported by the Office of Career-Technical and Adult Education, and it is fairly new. The focus of adult education folks is strongly in supporting this effort, and it is a great way to hear about their initiatives.

**Mitsui:** The *American Technical Training Fund* offers a way to continue the work that TAACCCT started by creating centers of innovation across the country in career-technical education (CTE). This initiative offers a means of rigorously evaluating outcomes, identifies what makes sense to scale, and then scales it. That's the very short, abridged version of the grant. There could be all kinds of elements that would be examined that are part of high quality career pathways. Whether it's embedded remediation, or contextualized remediation, or taking a look at the employer engagement piece and how employers articulate with the development of the program and the curriculum, and how the faculty engage in pedagogy and curriculum development, how core sequences are delivered. Whether it's online, for example, or a combination, what we're learning from TAACCCT is the importance of collaboratives and the convenings, and sort of the relationship building that occurs when we create a community of practice.

**Bragg:** What are your thoughts on what might be effective in scaling these innovations? How are we going to ensure that the improvements last?

**Mitsui:** Right. Well, one type of data that we need is policy-related data. That is where initiatives like the new Center for the Analysis of Postsecondary Readiness out of the Institute of Education Sciences and I think campus decision makers need more financial data. They need to understand the shorter-term costs, and the longer-term investments, as well as the cost/benefit ratio. A campus administrator needs to understand that the redesign of developmental education might cost something up front; for example, it might result in reduced developmental education course enrollment and reduced tuition revenue. However, we might get better outcomes for developmental education students and the cost per completion may go down. These are important data pieces for campus presidents. Even though many states are moving toward performance-based funding, there still is enrollment-based funding for the majority of state funds. And so you think about, "how am I going to maintain that funding stream while I also innovate?" But if you know that you can put money aside and in three years or so you'll start to see a return, and student outcomes are better than that could help the scaling process. Right now, people take a look at the straight cost associated with interventions or innovation, and then multiply it times the number of students they think they need to reach with that and then go "oh, that's way too expensive," and that's quite often the end of it.

**Bragg:** Through the Transformative Change Initiative (TCI) Evaluation Collaborative, we are encouraging evaluators of TAACCCT consortia to think about ROI and test ideas with TAACCCT practitioners. These ideas are beginning to take hold. Evaluators are beginning to ask if they can partner to get cost data for the TAACCCT innovations. They already have outcomes data, so if they can bring outcomes results together with cost data, some interesting results might emerge. I think that is a critical piece that could easily be lost in all this.

**Mitsui:** I agree.

**Bragg:** Is there anything else you want to share with our OCCRL audience that you think is important for community college educators to know about your work, or about federal policy?

**Mitsui:** Yes, we know how important the faculty role is, and the work that's done each and every day is very important. I can remember when I was teaching, and I remember how isolated the position can be, and how I welcomed interactions with other faculty – the opportunity to exchange practices and support each other and to just have someone to bounce ideas off of – it's important that we engage and support faculty who are working on the ground level to make these reforms happen.

**Bragg:** Right, right. Faculty are especially important when colleges are going through change. There is a lot of responsibility. Faculty need support. In our work at OCCRL, we see that faculty are pretty excited about making changes. They want their students to succeed, and I keep saying that, I don't know any faculty member who doesn't want their students to succeed.

**Mitsui:** Yes. Exactly.

**Bragg:** So they need to be partners. We need more faculty in the room. Well, thank you!

**Mitsui:** You bet.

**Bragg:** Thank you very much. ♦

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# Pathways to What?: The Implications of Learning Outcomes Paradigms for *Pathways to Results*

by Heather McCambly, Project Coordinator for Pathways to Results, Office of Community College Research and Leadership

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As OCCRL's Signature *Pathways to Results* (PTR) initiative anticipates its seventh year working with community college teams to improve student pathways through systematic engagement with partners, and with equity and outcomes data, we are reflecting on the larger context of what it means to improve student outcomes on a national scale and within the state of Illinois. In a scan of the national landscape and Illinois' historical initiatives, two reports, released 18 years apart, produce some common challenges to the traditional approach to measuring and supporting community college student success. These challenges show promise, in the context of an equity-focused campus change model like PTR, to move OCCRL's work to a more transformative place where practitioners are equipped to not only streamline pathways to improve completion, but also to more deeply transform pathways to support student learning and long-term equitable opportunity even beyond college completion.

The first of these reports, which is actually a pair of connected publications, was just released in January 2015 by the Association of American Colleges and Universities' (AAC&U) General Education Maps & Markers (GEMs) project. The second, a report entitled *Blurring the Lines: Integrating Academic and Occupational Instruction at the Community College*, was written by the Illinois Task Force on Academic/Occupational Integration in 1997. These reports draw conclusions about the importance of engaged learning and educational quality with profound implications for community college pathways (both academic and Career and Technical Education pathways), practical change initiatives, data used to assess pathways, and how we understand equity and equitable outcomes. This article reviews both of these highly relevant resources and provides reflections for practice in terms of what we, as leaders of the *Pathways to Results* initiative, can do to support more equitable outcomes and what practitioners working outside of a PTR project can consider in their own assessment efforts.

## General Education Maps & Markers (GEMs): An Emerging Framework

General education takes up some or most of a student's first two years of college at any institution; these are also the years in which the largest proportion of students will drop out without completing a degree program. Despite this, there has been very little effort in the field to understand how the general education experience as a whole, not just isolated parts such

as development education or student supports, but the entire curricular and co-curricular experience hinders our students and what could be changed to transform outcomes. This focus on a largely untouched issue in higher education may be the most compelling piece of the GEMs project. The project has set its sights on the radical redesign of general education as a vehicle through which institutions across all sectors, and across all majors, can reach "virtually all degree-seeking students" (see p. 6 of *General Education Maps and Markers*).

At its recent centennial celebration, AAC&U chose to emphasize its commitment to advancing equity in liberal education at both four-year and two-year institutions, a principle that is featured in many of its projects and research endeavors from the last decade. In a space crowded with initiatives designed to improve completion, AAC&U has marked out a unique territory—one that emphasizes equitable student learning within the context of completion. In the words of the AAC&U board, "access to educational excellence is the equity challenge of our time" (see p. 1 of *General Education Maps and Markers*). After all, what is a completed degree without the learning and skills it is meant to represent?

This equity emphasis has placed the community college sector at the center of AAC&U's current programming. In fact, AAC&U invited OCCRL's Dr. Debra Bragg to join one of three national working groups guiding the future and founding principles of its GEMs project.

The GEMs project debuted two products in January. The first is an introduction and articulated set of principles setting out the GEMs vision for a more integrated, transparent, empowering, and equitable general education program. The GEMs principles aim to turn the foundation of general education—a confusing, "cafeteria style" experience of course selection fraught with transfer barriers, detached and disparate coursework, high-fail rate prerequisites, and a prevailing sense that "these are the classes you just get out of the way"—on its head.

The second GEMs product, a report titled *America's Unmet Promise*, authored by researchers at the Center for Urban Education, uses data to illustrate the inequities and biases that continue to define American higher education institutions and outcomes. The authors point out that the benefits of a high-quality education, like the one set forward by the GEMs vision, remain stratified across racial, ethnic, and socioeconomic

lines. Our nation's highest-need students are most often funneled into the lowest-resourced institutions lacking the types of support, enriched learning, and programs of study that provide the building blocks for future success and professional advancement. *America's Unmet Promise* closes with a call for institutions to assess and take responsibility for students' equitable outcomes, particularly students of color.

This call resonates with our belief at OCCRL that equity-minded institutional reflection will move us from the idea that "if we had better students, we would have better outcomes," to the idea that "if we create better processes, our students will demonstrate better outcomes" (see p. 7 of OCCRL's Process Assessment module). Or in the words of *America's Unmet Promise*, it's time to stop placing "responsibility for student success on the very groups that have experienced marginalization, rather than on the individuals and institutions whose responsibility it is to remedy that marginalization" (see p. 2 of *America's Unmet Promise*).

The GEMs vision asks systems and institutions to consider a radical approach to general education reform – a very tall order. The GEMs principles are accompanied by a set of critical questions that might help a committee begin to reflect on the (likely) gaping divide between the GEMs vision and the current institutional reality. However, these tools do not yet outline a systematic approach that would connect principles to critical student outcomes, and finally to sustainable organizational change. The vision is enormous and will require intensive participation from P-20 educators, policymakers, and community stakeholders. Its emphasis on equity will also require a mechanism for analyzing processes and data to identify gaps and validate the equitable impact of solutions aligned to each of the GEMs principles (e.g. student agency, proficiency, integrative learning).

The Pathways to Results initiative at OCCRL has spent years testing and improving a process that can facilitate this kind of equity-driven transformation. PTR provides a structure through which Illinois Community Colleges build partnerships, use disaggregated data, and reflect intentionally on taking institutional responsibility for supporting equitable student outcomes. Given the program's roots in both the community college and originally in Perkins-funded Career and Technical Education programs, PTR has been applied specifically to individual programs of study and has used input, persistence, and completion metrics to produce evidence of outcomes gaps. To be sure, these data point to significant equity gaps and open a door to reveal faulty processes. However, PTR has not delved as deeply into other sources of data: student voices to reveal experience, agency, and students' understanding of pathways; student work to reveal inequities in learning; student participation in high-impact practices; long-term career advancement and preparedness to enter four-year universities; and other important markers that the GEMs vision cites as critical to a more equitable future for our students.

## "Blurring the Lines": The Case for Integrative Learning—18 Years Ago

Many educational leaders working in the community college space in Illinois are familiar with the 1997 report, *Blurring the Lines: Integrating Academic and Occupational Instruction at the Community College*. Although this report is 18 years old and focuses solely on Career and Technical Education programming, it nonetheless taps into many of the themes and aspirations that dominate the GEMs vision for engaged and integrative learning. *Blurring the Lines* mirrors national conversations about the quality and equity of workforce preparation; "stackable" credentials that lead students from a certificate in a technical field, to an associate's, and finally to a bachelor's degree and beyond; and the value of high-impact practices touted by organizations like the Center for Community College Student Engagement or the Association of American Colleges & Universities.

*Blurring the Lines* details specific practices that can improve student engagement and meaningful learning in community college programs through integration of technical learning with academic content, team learning, or work/community-based experiences. Key practices listed in this report could come straight from current research on high-impact practices that improve student learning and retention: learning communities, contextualized curriculum (a hot topic in developmental education reform), linked courses that allow students to apply skills and learning in multiple settings, capstone courses and projects, work-based learning or internships, and interactive class experiences.

We know from a growing body of national research that these types of practices show promise to close achievement gaps for our growing population of diverse learners. Most importantly, we also know that students of color and low-income students are often less likely to engage in such practices due to issues related to enrollment stratification and funding with a greater number of these student attending community colleges than public or private four-year universities.

Reviewing this report brings to the forefront a pressing issue that demands our attention in the Pathways to Results (PTR) process: if engagement in integrative learning experiences enhances student success and prepares students to enter and *advance* in the workforce, how is PTR consistently supporting community college teams to use data to explore student access to and benefit from such programming? How can practitioners measure these outcomes? Although some teams have surely tackled this issue, how can the PTR process sustainably open up this question for each and every team?

## Implications for Pathways to Results

While *Blurring the Lines* explored a number of effective practices and the barriers to pursuing deeper curriculum integration at

community colleges and particularly in CTE programs, it did not set out a process for implementing change, nor did it provide a vision for gauging when an institution has “arrived” at the goal. To compliment this exploration, the more recent GEMs publications do indeed offer a *vision*, but still leaves leaders and practitioners without a *process for transformation*. Taken together, the GEMs vision and the connections to CTE created in *Blurring the Lines* challenge OCCRL to think about how PTR, as a tested and equity-minded process, can integrate these important equity components in the effort to transform pathways in Illinois. Given its systematic approach, PTR has the potential to take community colleges farther into the realm of high-impact practices and integrated learning experiences. However, such inquiry takes a step beyond assessing retention or completion into the complex territory of student preparation for long-term success, including focusing on integrated soft and analytical skills needed for future educational endeavors and for equitable advancement in the workforce. This inquiry will require engagement among educational leaders with questions such as:

*How can we engage more meaningfully with student voices to create and understand student empowerment and agency? How can we use data to understand students’ experiences in CTE pathways with integrated general education curriculum? How can we reframe “success” and “completion” to include student proficiency (and preparedness for entry into both the workforce and advanced education)?*

The inherent complexity of assessing integrative learning opportunities is daunting, but PTR is poised to delve into this arena. Embedding attention to integrative learning experiences and high-impact practices into PTR’s equity and outcomes inquiry process may create a road to truly stackable credential pathways that lead from CTE programs through bachelor’s degrees and beyond. The PTR process can do more to advance practices with demonstrated equitable outcomes. As dozens of PTR teams have already learned by analyzing disaggregated student-level data, inequities in student outcomes are not insurmountable when armed with the right tools. ♦

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# Perspectives on Opportunity Generating Pathways at OCCRL's Scaling Up Conference

by Jacqueline E. Rodríguez, Graduate Research Assistant, Pathways to Results, Office of Community College Research and Leadership

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On Tuesday March 10, 2015, OCCRL and PTR held its annual Scaling Up Pathways to Results Conference. A number of speakers from across educational sectors and pathways were present. A plurality of these speakers and interactive workshops focused on the significance of partnerships, leadership, civic engagement, and inclusiveness, in discussing program implementation and pathways to success. In doing so, all affirmed the need for equitable outcomes.

## The Need for Quality Jobs and Wages in Generating Career Opportunities

Vickie Choitz, Associate Director of the Economic Opportunities Program at the Aspen Institute, opened the conference with her keynote address entitled: *Raising Floors and Building Ladders: Why We Need Both Paths to Achieve Equitable Outcomes*. Stressing the need for both educational opportunities and career pathways, Choitz reminded the audience of the need for livable wages in generating opportunities out of poverty, stating, “we may succeed in getting students through career pathways, but what is waiting for them on the other side? [...] people can’t climb ladders on shaky floors.” As such, she stated the need to connect students with business partners that “are raising floors” and thus providing students with higher wages. On the other hand, Choitz also supported ending business partnerships that did not provide students with quality jobs or wages, as they did not present positive or beneficial collaboration. Her talk, while specifically focusing on labor market prospects for low-income students, reflected not only the promotion of equitable educational and occupational outcomes in programs of study, but also PTR’s commitment to advancing equity through its research, partnerships, and professional development opportunities.

## Building Soft-Skills Among Low-Income, First Generation Minority Students

Following Choitz’s address, Jessica Besser-Rosenberg, Director of Research and Communications at *One Million Degrees* in Chicago, articulated the importance of soft-skills in the professional development and career advancement of low-income, first generation minority students. In the interactive workshop *One Million Degrees: Empowering Community College Students to Succeed in School, in Work, and in Life*, Besser-Rosenberg defined soft-skills as including critical

thinking, problem solving, communication, collaboration, creativity, initiative, self-direction, social and cross-cultural skills, productivity, and accountability. According to Besser-Rosenberg employees are currently entering the workforce without such skills, specifically low-income first generation minority students who do not have access to social and cultural capital that aids in the development of these skills. She states this as being a concern, as it is ultimately softs skills that are conducive in career upward mobility over the long term. Additionally, these skills are harder to develop than technical skills.

As a result, One Million Degrees (OMD), a nonprofit organization committed to empowering low-income, highly motivated community college students to succeed in school, in work, and in life, has focused on developing the soft-skills of their students. In providing academic, professional, personal, and financial support, Besser-Rosenberg states that much of their programming is focused on soft-skills development, specifically professionalism and executive functioning skills.

## Cultural Competence in Program Implementation

In addition to OMD’s focus on soft-skills development, Dr. Lorenzo Baber, Assistant Professor of Education Policy, Organization and Leadership at the University of Illinois, Urbana Champaign, illustrated the importance of cultural competence in serving the needs of low-income ethnic and racial minority youth. Through the course of their initiatives, they have come to realize the importance of constructing services around the needs of unique student experiences as not all students, even while being low-income, have the same needs. Dr. Baber stated that while serving an urban neighborhood in Chicago, OMD noted that many of them were not making use of the tutoring services provided. Moving away from a deficit framework of action, they realized student lack of participation was not due to lack of agency but to the lack of daycare available to them, as many were parents. OMD responded to this need through building new partnerships with childcare providers so that students could maximize all services provided by OMD. Such efforts reinforce the importance of partnerships, cross-cultural understanding, holistic approaches, and the need to widen the road of opportunities by providing students with the tools necessary for them to fulfill their potential.

## Constructing, Evaluating, and Implementing Pathways to Success

As the conference proceeded into the day, the energy and mission continued. During lunch, Dr. Rich Halverson, Professor of Education Policy and Curriculum Instruction at the University of Wisconsin-Madison, gave a speech that once again encouraged conference attendees to re-think strategies. In a digital era it is important to customize learning strategies for students around 21<sup>st</sup> century tools such as Facebook, YouTube tutorials, and other social and technological outlets. Dr. Halverson argued that his is critical if educators want to keep up with not only the current trends of the era, but also best engage students in all learning capacities.

Following Dr. Halverson, an afternoon plenary titled *Using High-Impact Practices to Strengthen Student Transitions and Success* featured speakers across the educational pathway: Jermaine Williams from Northeastern Illinois University; Judith Marwick from William Rainey Harper College, and Luis Narvaez and Dakota Pawlicki, from Chicago Public Schools. Speakers shared their strategies for assessment as well as cross-sector partnerships that have produced significant results for low-income, first generation minority youth undergoing educational transitions. This included NEIU's award-winning

summer bridge program for first generation African American and Latino students; Chicago Public Schools' partnerships with Chicago Higher Education Compact and Latino College Access Committee; and Harper's alignment efforts that resulted in double-digit percentage increases in dual enrollment and decreases in the need for developmental education for incoming students. Moreover, the panel emphasized the need to bring existing solutions to scale for all students by leveraging existing support and allocating resources to scale evidence based-work, rather than conducting or adding on to pilot programs. Additionally the panel also stressed the importance of effective partnerships or trust-based networks, strategic use of evidence and data as so many others did so throughout the conference. As the day ended and the conference came to a finale, one point was clear; the student's needs were always placed first in constructing, evaluating, and implementing pathways that would lead to equitable outcomes. ◆

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- Conference Resource page: <https://www.dropbox.com/sh/y6shbu93tbiz9bn/AAAAe38PdICcV8sgLbuymIBga?dl=0>
- One Million Degrees (OMD) page: <http://www.onemilliondegrees.org>



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## Building Illinois' Green Workforce through Career Pathways

by Sherry Burlingame, Career Pathways Project Director, College of Lake County

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The Illinois Green Economy Network (IGEN) is a consortium of Illinois community colleges working together to grow the green economy of Illinois. IGEN's mission is to provide a platform for collaboration among all Illinois community colleges and their partners to drive growth of the green economy. IGEN's unique statewide cooperative approach leverages the power of a sustainability network with the deep community connections of individual colleges to expand deployment of clean energy technologies, increase employment opportunities, improve environmental and human health, foster community engagement, and accelerate market competitiveness.

In 2011, the College of Lake County, on behalf of the IGEN, was awarded a \$19.37 million grant from the Department of Labor (DOL) as part of round one of the Trade Adjustment Act Community College Career Training (TAACCCT) grant program. The project, IGEN Career Pathways, brings together 17 Illinois community colleges working as a consortium to create over 35 on-line blended and hybrid degree and certificate programs in green career fields. The project's goals align with the four priorities outlined by the DOL: to accelerate progress for low-skilled and other workers; to improve retention and achievement rates to reduce time to completion; to build programs that meet industry needs, including career pathways; and to strengthen online and technology-enabled learning.

Creating academic programs that lead to job opportunities is a major focus of the IGEN Career Pathways Project. To ensure that the programs created meet the needs of employers, the IGEN Career Pathways Project partners with Illinois' green industry leaders to create academic programs designed to meet the needs of industry and to identify opportunities for place-based learning and internships.

Through this project, academic certificates and degrees were developed for five industries – Science, Technology, Engineering, and Mathematics (STEM), Advanced Manufacturing, Architecture and Construction, Agriculture and Natural Resources, and Transportation. Programs include a wide-range of career fields such as local foods, sustainable agriculture, green buildings management, weatherization, automotive recycling, solid waste, wind turbine technician, solar installation, smart grid, and many more. By September 2015, the 17 participating colleges will have created over 185 open-source courses supporting 35 degrees and certificates in sustainability-related fields. As of Spring 2015, the IGEN Career Pathways Project has over 400 degree and certificate seekers or graduates throughout the consortium.

Leveraging the NTER Learning Management System (LMS) that was created for the Department of Energy, this project has customized this system to provide a platform for blended on-line learning for instructor-led classes. Additionally, because the course content is open-source, any college in the country will have access to the course content, including images, videos, and syllabi – this will allow for curriculum in these emerging green careers to be replicated and standardized as academic programs become more prevalent. (Courses will be available at [www.SkillsCommons.org](http://www.SkillsCommons.org) in Fall 2015.)

To accelerate progress and improve retention in the programs being created by the Project, embedded general education courses have been added to select career programs. These courses are developed jointly with general education and career instructors. An example of this effort is a joint HVAC and technical writing course offered by the College of Lake County. Students enrolled in this course receive three credits in HVAC and three credits in technical writing, this allows for a compressed time frame for the Associate of Applied Science degree and for contextualized content designed to retain students through completion.

Another key piece of the project is the creation of Adult Transition Services on five of the partner college campuses. This effort is designed to help low-skilled adults access the services they need to prepare for college coursework. Through this effort, the Virtual Career Network ([www.VCN.org](http://www.VCN.org)) was created to assist adults to prepare and qualify for well-paying careers by connecting them to education and training opportunities and providing services such as skills brush-up, test taking, career assessment, and success planning. The IGEN Career Pathways Project has served over 2,000 career seekers, dislocated workers and other adults.

IGEN Career Pathways is an exciting project designed to take Illinois community colleges to the next level to produce a workforce with the skills necessary to be active participants in Illinois' green economy. To learn more, please visit [www.igencareerpathways.org](http://www.igencareerpathways.org). ♦

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*Dr. Sherry Burlingame has several years of experience planning and implementing programs at Illinois Community Colleges in support of programs of study and career pathways development and support. She is a strong proponent of Career and Technical Education (CTE) and has worked closely with deans and faculty at Waubesa, Triton, and College of Lake County to plan and implement CTE pathways. Dr. Burlingame may be reached at [sburlingame@clcollinois.edu](mailto:sburlingame@clcollinois.edu)*

# Strengthening Career Pathways in Manufacturing Education

by Rebecca Lake, Grant Director, INAM; Melissa MacGregor, Director, Harper College; & Catherine Kirby, Researcher, Office of Community College Research and Leadership

## The Illinois Network for Advanced Manufacturing (INAM)

The Illinois Network for Advanced Manufacturing (INAM) consortium is comprised of 21 of the 48 Illinois community colleges led by William Rainey Harper College. INAM works to expand and improve the delivery of education and career training programs leading to industry-recognized certificates or associate degrees for employment in high-wage, high-skill advanced manufacturing occupations: Certified Production Technology (CPT), Metal working/Welding, Mechatronics/Robotics, Precision Machining (CNC), and Industrial Maintenance.

### Overview

Three years of partnership planning preceded the award of this grant and served as the foundation of INAM's grant priorities, strategies, and work plans. A key goal was to improve students' ability to enter their local community college's manufacturing programs at the right level based on their experience and educational needs. INAM priorities address students' needs by: creating a practical career pathway; using individualized educational plans; establishing common terminal certificate objectives in innovative manufacturing curricula; purchasing advanced manufacturing equipment; expanding and maintaining employee partnerships; developing job placement services; and establishing articulation agreements between community colleges and four year institutions to streamline further pursuit of advanced degrees.

## Strengthening Career Pathways in Manufacturing: Major Themes

**1. Use of Student Educational Plans.** INAM co-grantee colleges developed and implemented an individualized planning tool for use by advisors and students. After discussions with their INAM "advisor/coach" each student receives a completed Educational Plan which provides a list of courses and the dates specifying when to take them. The plan clearly outlines the program requirements and displays the career pathway to a specific certificate in advanced manufacturing programs. In addition to the Educational Plan, INAM "advisor/coaches" play a more intrusive advising role than traditional college advisors. It is felt this more continuous interaction has contributed to increased student retention in manufacturing programs at all the INAM colleges to over 90%.

**2. Agreed Upon Terminal Learning Objectives.** Faculty in each of INAM's five advanced manufacturing programs came together and agreed upon terminal learning objectives for the first certificate in each discipline. With this unique agreement, faculty at each college owned the decision-making about their own curriculum, yet all were able to align their courses and curriculum with the common terminal learning objectives. Faculty at each college decided the number of courses in beginning certificates; therefore, not all the certificates require the same number of courses and credits throughout the INAM colleges. However, all can be completed in one year or less. All courses in each certificate are open educational resource (OER) courses and hosted on the INAM website (inam.net) available for any faculty to use and adapt content for their programs.

**3. Course Scheduling.** Using college program data, many colleges found that course schedules caused unnecessary wait time for students in completing a certificate. This was the impetus for advanced manufacturing faculty to revamp the organization of a program's course scheduling to better facilitate certificate and degree completers. These colleges developed a more concise and quicker sequential order for course offerings which shortened the time to completion. Data collection relevant to each INAM student provided the opportunity for the colleges' INAM "advisor/coach" to do a more focused assessment regarding how many courses remain on a student's individualized Educational Plan.

**4. Outreach to Area Business and Industry Employers.** INAM colleges' Advisory Committees have been inspired with renewed energy, and new partnerships have been formed to discuss and determine the required skills needed in manufacturing jobs. Several results of more frequent communications include (a) an improved alignment of curriculum to current job expectations; (b) more businesses hosting student tours and offering internships; and (c) increased donations of needed equipment, training devices, materials and more by area employers. In addition, college faculty have visited area employers and participated in key discussions that have helped shape strategic planning and expansion of advanced manufacturing programs.

**5. Articulation Agreements with Universities.** A blanket articulation agreement was reached with five Illinois universities for students earning an advanced manufacturing AAS degree from INAM colleges. This allows AAS completers to transfer all their credits in advanced manufacturing to the chosen university, building the career pathway concept for this industry sector in

Illinois. Elements of the articulation agreements include the following: (1) the university will accept all the credits of the AAS degree; (2) the university will allow the student to take additional coursework at the local community college (such as a 3 plus 1) and count it toward a bachelor's degree; and (3) the coursework for the bachelor's degree is online, improving access and making attendance more convenient for all students.

For more information online, visit the Illinois Network for Advanced Manufacturing at <http://inam.net/>.



## Building a Consortium Culture

Embedded in the INAM consortium culture and established at the beginning of the project is an emphasis on frequent two-way communication, budgetary transparency, and support from the INAM Grant Office at the lead college. A comprehensive database assists the INAM Grant Office to keep apprised of which colleges are on track in meeting outcomes, spending their grant funds, and which need additional assistance. The 21 INAM member colleges are working closely as a consortium to meet the INAM goals, the DOL deliverables, and each college's specific objectives; each college has played a unique role. Consortium leadership believes that they have achieved commitment and sustainability among the INAM colleges. It is anticipated that the INAM colleges will continue to work together, meeting to share ideas and information after the INAM grant is done in 2016. ♦

*This article is based on a 2014 brief, Strategies for Transformative Change: Strengthening Career Pathways in Manufacturing Education, which is one in a series of briefs from the Transformative Change Initiative (TCI) describing selected strategies employed in TAACCCT consortia. To see all of the briefs in this series please visit [http://ocrl.illinois.edu/projects/transformative\\_change/transformative-change-initiative-resources/](http://ocrl.illinois.edu/projects/transformative_change/transformative-change-initiative-resources/).*

Outcome Projections	
1. Total Unique Participants Served	2,487
2. Total Number of Participants Completing a TAACCCT-Funded Program of Study	1,292
3. Total Number of Participants Still Retained in their Program of Study or Other TAACCCT Funded Program	1,132
4. Total Number of Participants Completing Credit Hours	2,054
5. Total Number of Credentials	1,826
6. Total Number of Participants Enrolled in Further Education After TAACCCT-Funded Program of Study Completion	462
7. Total Number of Participants Employed After TAACCCT-Funded Program of Study Completion	1,089
8. Total Number of Participants Retained in Employment After Program of Study Completion	915
9. Total Number of Those Participants Employed at Enrollment Who Received a Wage Increase Post-Enrollment	565

## Guiding Principles for Scaling Transformative Change

Since 2012, the Office of Community College Research and Leadership (OCCRL) and The Collaboratory have partnered to create the Transformative Change Initiative (TCI). TCI is dedicated to assisting community colleges to scale-up innovations that improve student outcomes and program, organization, and system performance. TCI defines transformative change as raising the individual, organizational, and system performance of community colleges to unprecedented levels without sacrificing their historic commitment to access and equity.

The Transformative Change Initiative (TCI) endorses the use of guiding principles that support the scaling of transformative change in the community college context. These principles do not dictate action, but rather enable informed decision making about innovation and reform. They reflect theory about scaling, while also integrating the practical advice of community college educators and partners.

We believe that using a principle-driven approach is vital to systemic change. Rather than selecting and implementing reforms from a menu, a principle-driven approach emphasizes understanding the interaction between context, change, and results on a deep level. Individuals who know the complexity of their settings and understand the diverse student populations who enroll in their programs appreciate the way a principle-driven approach helps to sustain and scale innovation. Guiding principles create a blueprint for scaling innovation that results in more equitable outcomes for diverse learners, including enhanced educational, economic, and social impact.

Based on initial research, the TCI team introduced a set of seven guiding principles for scaling innovation at the TCI Learning Lab in Orlando in 2014. During the summer of 2014, the team engaged practitioners in reviewing and revising these principles to ensure they reflect actual practice—what community college practitioners and their partners are seeing and doing day-to-day to scale change. The new set of eight guiding principles for scaling was presented at the TCI Learning Lab 2015 in Baltimore. The newly revised guiding principles, along with key supporting statements, follow:

**Leadership:** Scaling of transformative change will occur when leaders envision, encourage, and support innovation that supports all learners.

1. Transformative leaders advocate for access, equity, and opportunity for all students.
2. Transformative leaders have a deep understanding of existing organizational structures and lines of authority, and use this understanding to create an evidence- and performance-based architecture for the future.
3. Transformative leaders communicate skillfully about actions and attitudes that bring about real, deep and lasting change.

4. Transformative leaders use democratic strategies that focus on people and performance simultaneously to create equitable outcomes for all learners.

**Adoption and Adaptation:** Scaling of transformative change will occur when adoption and adaptation honor and influence the cultures of the settings involved.

1. Innovations are selected for adoption and adaptation based on a shared understanding of the intended effect of the innovation.
2. Transformative leaders identify the core elements of the innovation that align to their institutional needs and intended effect.
3. Adaptations are made to the innovation that reflect the needs of students, the organization's culture and policies, and other features of the local context.
4. Evidence is used to evaluate the efficacy of the adaptations.

**Evidence:** Scaling of transformative change will occur when evidence collected through ongoing and responsive evaluation is used strategically.

1. Transformative leaders utilize a variety of evidence, including data on process and implementation, performance, diverse stakeholder perspectives and experiences, and student impact.
2. Evidence is used to demonstrate the value of the innovation and influence policy and practice to maximize the impact of the innovation on student outcomes.
3. Transformative leaders use adaptive processes to collect, analyze, and use evidence to inform decision making.
4. Resources are dedicated to the collection, analysis, and dissemination of evidence about the innovation.

**Storytelling:** Scaling of transformative change will occur when storytelling is used to facilitate learning about innovation and transformative change.

1. Storytellers are from a variety of stakeholder groups.
2. Transformative leaders select storytellers for their ability to communicate effectively with diverse audiences.
3. Stories shared about the innovation feature the experiences of different stakeholder groups, including students and faculty.
4. Stories are concise and focus on the descriptions, context, and facts necessary to build understanding of the innovation.

**Networks:** Scaling of transformative change will occur when individuals engage in networks to gain access to expertise, professional development, and other vital resources.

1. Networks are used to connect people with different perspectives and areas of expertise, creating an opportunity for new insights and breakthroughs that can facilitate and accelerate transformative change.
2. Networks are used to improve information flow, increase communication and awareness of relationships, and identify new resources.
3. Networks expand and support leadership, increase inclusion, and encourage collaboration and innovation.
4. Transformative leaders use networks to share knowledge and practices, and foster a sense of identity, trust, and vision.
5. Networks that promote transformative change operate with a high level of transparency, a shared vision and sense of collective responsibility, and use their resources to enhance performance and achieve equitable outcomes.

**Dissemination:** Scaling of transformative change will occur when dissemination is led by individuals with deep knowledge of their settings.

1. Dissemination involves the targeted engagement of users at multiple levels and at multiple points in time.
2. All users actively engage in rethinking existing understandings as they learn about the innovation and make sense of it within their context.
3. Individuals engaged in dissemination intentionally translate the innovation to new contexts and they facilitate understanding of differences that exist across settings.
4. For an innovation to endure, stakeholders must continue to gather and disseminate evidence to facilitate understanding of how the innovation and the context have changed over time.

**Technology:** Scaling of transformative change will occur when effective and appropriate technology is used to strengthen resources and expertise.

1. Transformative leaders use technology to connect in ways they haven't connected before—to other people, resources, ideas, and data.

2. Technology provides the tools for a collaborative environment and provides access to a diversity of perspectives.
3. Technology accelerates information sharing and reduces the costs of supporting and scaling innovation.
4. Technology is used to enable, energize, and support the professional development and technical assistance needed for sustaining and scaling change.

**Spread and Endurance:** Scaling of transformative change will occur when innovations are chosen for scaling that show the potential to spread and endure.

1. Strategic decisions about what to scale and how to engage in the scaling process are needed to bring about transformative change.
2. Reflective learning (individual and collaborative) plays a critical role in scaling innovation over time.
3. Lessons learned scaling one innovation transfer to other innovations such that scaling becomes systemic and endemic.

By definition, transformative change is an evolving process. We expect that this set of guiding principles will continue to change as OCCRL researchers study the ways community colleges spread and sustain innovations in the future. What we are learning about scaling will help community colleges and their partners to engage in reform that has a lasting impact on students and other stakeholders. Lessons will be shared with the TCI network and others who seek more equitable educational outcomes for all students. Look for future work at [http://occrillinois.edu/projects/transformative\\_change/](http://occrillinois.edu/projects/transformative_change/). ♦

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*The Transformative Change Initiative is led by Debra Bragg. TCI team members include Catherine Kirby, Marianne Peacock, Deborah Richie, Heather Fox, and Heather McCambly.*

You can read more and download information about each guiding principle on the TCI Resources and Products page: [http://occrillinois.edu/projects/transformative\\_change/transformative-change-initiative-resources/](http://occrillinois.edu/projects/transformative_change/transformative-change-initiative-resources/).

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## Strategies for Transformative Change

by Marianne Peacock, Project Coordinator for the Transformative Change Initiative, Office of Community College Research and Leadership

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The Transformative Change Initiative (TCI) is dedicated to assisting community colleges to scale-up innovations that improve student outcomes and program, organization, and system performance. TCI defines transformative change as follows: Raising the individual, organizational, and system performance of community colleges to unprecedented levels without sacrificing their historic commitment to access and equity. The TCI team has created a scaling tool kit, briefs, and other materials to support community colleges as they scale innovations that result in more equitable outcomes for diverse learners.

One of our initiatives, the *Strategies for Transformative Change* brief series, shares the innovative strategies that colleges, TAACCCT consortia, and partners are implementing and scaling. Written collaboratively by consortia, evaluator, and TCI research team members, each two-page brief describes the strategies being employed and includes any available evidence of success. Below is a short overview of our first ten briefs in this series.

*Centralized Curriculum Process for Health IT Programs*; published April 2015: The Health eWorkforce (HeW) Consortium was formed to elevate national Health Information Technology workforce development efforts and train veterans, TAA-eligible workers, and others for promising careers in healthcare and Health IT. This brief describes this consortium's centralized support for curriculum and faculty development, course material standards, and more. Find the brief here: <http://occrll.illinois.edu/files/Projects/CCTCI/health.pdf>

*Short Term and Accelerated Training through Blocked Scheduling*; published February 2015: This brief describes strategies employed by the Tribal College Consortium for Developing Montana and North Dakota Workforce (DeMaND). There are 20 programs of study among the four colleges that have been created or enhanced by TAACCCT funds and are educating students to enter in-demand careers in the geographic region served. Find the brief here: <http://occrll.illinois.edu/files/Projects/CCTCI/demand.pdf>

*Strengthening Career Pathways in Manufacturing Education*; published February 2015: This brief describes strategies employed by the Illinois Network for Advanced Manufacturing (INAM ) consortium including creating a practical career pathway, using individualized educational plans, establishing common terminal certificate objectives in innovative manufacturing curricula, and establishing articulation agreements between community colleges and four year institutions to streamline further pursuit of advanced degrees. Find the brief here: <http://occrll.illinois.edu/files/Projects/CCTCI/inam.pdf>

*Building Student Engagement through Technology*; published February 2015: This brief describes the strategies employed by the Consortium for Healthcare Education Online (CHEO). CHEO project colleges understand the importance of hands-on, real world learning and are developing programming using technology to build stronger, credible skills required of today's healthcare worker. Find the brief here: <http://occrll.illinois.edu/files/Projects/CCTCI/cheo.pdf>

*Partnership Trifecta: Education, Workforce, and Industry*; published November 2014: The Florida TRADE Consortium represents 12 state and community colleges that came together under TAACCCT Round 2 to improve upon Florida's training and education system in advanced manufacturing. Florida TRADE is working to drive change through the partnership trifecta of education, workforce, and industry. Find the brief here: <http://occrll.illinois.edu/files/Projects/CCTCI/FloridaTRADE.pdf>

*Building Bridges for Student Success*; published October 2014: The National STEM Consortium (NSC) is a collaborative of ten community colleges in nine states developing five nationally portable, one-year (30-credit) certificate programs. This brief describes the STEM Bridge program designed to facilitate student transition into the programs of study. Find the brief here: <http://occrll.illinois.edu/files/Projects/CCTCI/stem-brief.pdf>

*Business and Industry Leadership Teams*; published September 2014: The National Information, Security, and Geospatial Technology Consortium (NISGTC) is a seven member national consortium collaborating to prepare students for employment in four information technology (IT) specialty areas. Building on the model provided by the National Science Foundation Convergence Technology Center, the consortium has developed a Business & Industry Leadership Team (BILT) for each specialty area. Find the brief here: <http://occrll.illinois.edu/files/Projects/CCTCI/BILT.pdf>

*Health Care Core Curriculum*; published February 2014: This brief describes the Health Professions Pathways (H2P) Consortium, which includes nine community colleges in five states. The colleges are implementing eight strategies, including 1) developing a core curriculum and 2) galvanizing a national movement to improve healthcare education via the widespread adoption of the core curriculum concept. Find the brief here: <http://occrll.illinois.edu/files/Projects/CCTCI/Reports/health-care-ash-ec.pdf>

*Developmental Education Redesign*; published February 2014: This brief presents the Colorado Online Energy Training Consortium (COETC). The COETC is a 15-member statewide community college consortium with dual goals--to expand opportunities for students to gain access to employment in the state's energy sector by providing new online/hybrid programs of study and to redesign the developmental education (DE) to accelerate students' passage of gatekeeper courses. Find the brief here: <http://ocrl.illinois.edu/files/Projects/CCTCI/Reports/dev-ed-redesign-fr-ccd.pdf>

*Intrusive Student Support and Contextualized Developmental Education*; published February 2014: The MoHealthWINs Consortium, which focuses on health care education, includes all 13 Missouri community and technical colleges, with urban, suburban, and rural locations. This brief describes two innovations, intrusive student support and contextualized developmental education, as implemented at two colleges: Mineral Area College and St. Louis Community College. Find the brief here: <http://ocrl.illinois.edu/files/Projects/CCTCI/Reports/intrusive-student-minarea-stl.pdf>

All briefs can be found, and are available for download, on the Transformative Change Initiative website here: [http://ocrl.illinois.edu/projects/transformative\\_change/transformative-change-initiative-resources/](http://ocrl.illinois.edu/projects/transformative_change/transformative-change-initiative-resources/). Please check back often as we will continue to add more briefs to the series in the coming months. ♦

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The Office of Community College Research and Leadership (OCCRL) was established in 1989 at the University of Illinois at Urbana-Champaign. OCCRL is affiliated with the Department of Educational Policy, Organization, and Leadership in the College of Education. Our mission is to use research and evaluation methods to improve policies, programs, and practices to enhance community college education and transition to college for diverse learners at the state, national, and international levels. Projects of this office are supported by the Illinois Community College Board (ICCB) and the Illinois State Board of Education (ISBE), along with other state, federal, and private and not-for-profit organizations. The contents of publications do not necessarily represent the positions or policies of our sponsors or the University of Illinois. Comments or inquiries about our publications are welcome and should be directed to [ocrl@illinois.edu](mailto:ocrl@illinois.edu). This issue and back issues of UPDATE can be found at: <http://ocrl.illinois.edu>. This publication was prepared pursuant to a grant from the Illinois Community College Board (ICCB Grant Agreement Number 2014-07331).

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